

AMENDMENTS TO THE CLAIMS

- 1-6. (Cancelled).
7. (New) A method for allowing users to virtually navigate a space, the method comprising:
 - capturing images of the space from a plurality of cameras;
 - generating a plurality of synthetic images corresponding to viewpoints along predefined paths through the space;
 - selectively transmitting sequences of at least some of the synthetic images to the users,wherein the sequence transmitted to each user corresponds to a respective navigation request received from the user.
8. (New) The method for allowing users to virtually navigate a space of claim 7, wherein the sequence transmitted to each user comprises synthetic images corresponding to viewpoints along at least one predefined path that most closely matches the navigation request.
9. (New) The method for allowing users to virtually navigate a space of claim 8, wherein the at least one predefined path comprises at least two predefined paths sharing a common junction.
10. (New) The method for allowing users to virtually navigate a space of claim 7, further comprising the step of defining positions of the paths and viewpoints based at least in part on positions of the cameras.
11. (New) The method for allowing users to virtually navigate a space of claim 10, wherein the defining step is performed before the generating and transmitting steps.
12. (New) The method for allowing users to virtually navigate a space of claim 10, wherein the defining step is performed once and the capturing, generating, and transmitting steps are performed repeatedly.

13. (New) A method for efficiently providing a visual presence of a scene to a plurality of simultaneous users, the method comprising:
 - defining a plurality of paths within the scene, each path terminating at a junction;
 - defining a plurality of viewpoints along each path;
 - capturing images of the scene from a plurality of cameras;
 - generating a synthetic image corresponding to each viewpoint;
 - combining synthetic images corresponding to viewpoints along a path to produce a sequence of images;
 - receiving a navigation request from at least one user of the plurality of simultaneous users;
 - selecting a path of the plurality of paths based on the navigation request;
 - displaying a sequence of images corresponding to viewpoints along the selected path to the at least one user.
14. (New) The method for efficiently delivering a visual presence of claim 13, wherein each sequence of images begins with an image from a viewpoint at a first junction and ends with an image from a viewpoint at a second junction.
15. (New) The method for efficiently delivering a visual presence of claim 13, further comprising queuing a second navigation request received from the at least one user while a sequence of images is being displayed to the at least one user.
16. (New) The method for efficiently delivering a visual presence of claim 13, wherein the plurality of cameras comprises pairs of cameras with at least partially overlapping views and substantially similar viewing angles.

17. (New) The method for efficiently delivering a visual presence of claim 13, wherein the plurality of cameras comprises cameras arranged substantially parallel to the paths.
18. (New) The method for efficiently delivering a visual presence of claim 13, wherein clusters of at least some of the plurality of cameras are located near junctions.
19. (New) The method for efficiently delivering a visual presence of claim 13, wherein the plurality of simultaneous users comprises at least one thousand users.
20. (New) A system for efficiently providing a virtual presence within a scene to a plurality of users, the system comprising:
 - a plurality of cameras comprising pairs of cameras, each pair configured to capture at least partially overlapping views of at least a portion of the scene at similar viewing angles;
 - at least one image processor configured to generate synthetic images corresponding to viewpoints along predefined paths within the scene and combine the images into sequences of images;
 - at least one router configured to select sequences in response to navigation requests;
 - at least one user processor configured to compose a video stream for each user comprising at least one sequence selected by the router;
 - a plurality of user devices, each coupled to at least one user processor via a data network and configured to display a respective video stream.
21. (New) The system for efficiently providing a virtual presence of claim 20, wherein each sequence of images comprises synthetic images corresponding to the viewpoints along a path.

22. (New) The system for efficiently providing a virtual presence of claim 21, wherein at least some of the sequences of images comprise synthetic images corresponding to the viewpoints along two or more paths sharing at least one common junction.
23. (New) The system for efficiently providing a virtual presence of claim 20, wherein the router is further configured to select a sequence comprising images from viewpoints along a path, wherein the path best matches a navigation request.
24. (New) The system for efficiently providing a virtual presence of claim 20, further comprising a load balancer configured to balance users among the at least one user processor.
25. (New) The system for efficiently providing a virtual presence of claim 20, wherein the user devices are further configured to transmit navigation requests.
26. (New) The system for efficiently providing a virtual presence of claim 20, wherein at least one of the user devices is a personal computer.
27. (New) The system for efficiently providing a virtual presence of claim 20, wherein the data network is the Internet.
28. (New) The system for efficiently providing a virtual presence of claim 20, wherein the system is configured to provide a virtual presence to more than one thousand simultaneous users.